

## XIAO YANG

Department of Ecology and Evolutionary Biology

School of Life Sciences Fudan University

220 Handan Road Shanghai 200433., China

E-mail: [yangxiao@fudan.edu.cn](mailto:yangxiao@fudan.edu.cn) or [xyang.fdu@gmail.com](mailto:xyang.fdu@gmail.com)

### EDUCATION

2006-2013: PhD in Science, Fudan University, China.

Supervisor: Bao-Rong Lu.

2002-2006: Bachelor of Science in Agriculture, Zhejiang University, China.

Supervisor: Shu-Sheng Liu.

### WORK EXPERIENCE

2013-2014: Postdoctoral Researcher, Fudan University, China.

Advisor: Chang-Ming Fang

2014-now: Postdoctoral fellow, Ohio State University, United State.

Advisor: Allison A. Snow

### RESEARCH INTERESTS

- Fitness effects of transgenic overproduction of EPSPS in *Oryza sativa*, *Oryza rufipogon*, and *Arabidopsis thaliana*
- Impact of introgressed transgenes on fitness and potential evolution of rice wild relatives
- Evolutionary impact of transgressive segregation on crop-weed hybrid progeny of rice
- Impact of transgenes on segregation in rice crop-weed and crop-wild hybrid progeny

### PUBLICATIONS

#### Peer-reviewed journals

- 2016- Lu B-R, **Yang X**, Ellstrand NC. Fitness correlates of crop transgene flow into weedy populations: A case study of weedy rice in China and other examples. *Evolutionary Applications*, 2016. (Published online DOI: 10.1111/eva.12377)
- 2016- Xia H, Zhang HB, Wang W, **Yang X**, Wang F, Su J, Xia HB et al. 2016. Ambient insect pressure and recipient genotypes determine fecundity of transgenic crop-weed rice hybrid progeny: Implications for environmental biosafety assessment. *Evolutionary Applications*. 2016. (Published online, doi:10.1111/eva.12369).
- 2015- **Yang X**, Li L, Cai X, Wang F, Su J, and Lu B-R. Efficacy of insect-resistance *Bt/CpTI* transgenes in F5–F7 generations of rice crop–weed hybrid progeny: implications for assessing ecological impact of transgene flow. *Science Bulletin*, 2015, 60, 1563–1571.
- 2014- Lu B-R, Snow AA, **Yang X**, Wang W. Using a single transgenic event to infer fitness effects in crop–weed hybrids: a reply to the letter by Grunewald and Bury. *New Phytologist*, 2014, 202(2), 370-372.
- 2014- Lu B-R, Snow AA, **Yang X**, Wang W. Scientific data published by a peer-reviewed journal should be properly interpreted: a reply to the letter by Gressel et al. *New Phytologist*, 2014, 202(2), 363-366.
- 2014- Wang W, Xia H, **Yang X**, Xu T, Si HJ, Cai XX, Wang F, Su J, Snow AA, Lu B-R. A novel 5-enolpyruvylshikimate-3-phosphate (EPSP) synthase transgene for glyphosate resistance

- stimulates growth and fecundity in weedy rice (*Oryza sativa*) without herbicide. *New Phytologist*, 2014, 202(2), 679-688
- 2014- Ratnasekera D, Perera UI, He ZX, Senanayake SGJN, Wijesekara GAW, **Yang X**, Lu B-R. High level of variation among Sri Lankan weedy rice populations estimated from morphological characterization. *Weed Biology and Management*, 2014.
- 2014- Yang C, Wang Z, **Yang X**, Lu B-R. Segregation distortion affected by transgenes in early generations of rice crop-weed hybrid progeny: implications for assessing potential evolutionary impacts from transgene flow into wild relatives. *Journal of Systematics and Evolution* (on-line), 2014.
- 2013- **Yang X**, Lu B-R. Tracking Chinese terminology of gene flow: its implications in biosafety and evolutionary research. *Journal of Biosafety*, 2013, 22(2): 74-79.
- 2013- Zhang HB, Xia H, **Yang X**, Lu B-R. Fitness effect on insect-resistant F2 progeny of crop-weedy rice hybrids under different cultivation modes. *Journal of Fudan University* (Natural Science), 2013, (4): 419-427.
- 2012- Yang C, **Yang X**, Fu Q, Xu K, Lu B-R. Limited divergence among populations of rice striped stem borer in southeast China caused by gene flow: Implications for resistance management. *Journal of Systematics and Evolution*, 2012, 50(5): 443-453.
- 2012- **Yang X**, Wang F, Su J, Lu B-R. Limited fitness advantages of crop-weed hybrid progeny containing insect-resistant transgenes (*Bt/CpTI*) in transgenic rice field. *PLoS ONE*, 2012, 7(7): e41220
- 2012- Xu K, **Yang X**, Cai XX, Lu B-R. Distorted allelic segregation in F2 populations derived from crosses of insect-resistant transgenic (*Bt/CpTI*) rice and its non-transgenic parent with common wild rice. *Journal of Fudan University* (Natural Science), 2012, 51(3): 259-268.
- 2011- **Yang X**, Xia H, Wang W, Wang F, Su J, Lu B-R. Transgenes for insect resistance reduce herbivory and enhance fecundity in advanced generations of crop-weed hybrids of rice. *Evolutionary Applications*, 2011, 4(5): 672-684.
- 2011- Xiong ZY, Zhang SJ, Ford-Lloyd BV, Jin X, Wu Y, Yan HX, **Yang X**, Lu B-R. Latitudinal distribution and differentiation of rice germplasm: its implications in breeding. *Crop Science*, 2011, 51(3): 1050-1058.
- 2011- Xia H, Lu B-R, Xu K, Wang W, **Yang X**, Yang C, Luo J, Lai FX, Ye WL, Fu Q. Enhanced yield performance of Bt rice under target-insect attacks: implications for field insect management. *Transgenic Research*, 2011, 20(3): 655-664.
- 2010- Lu B-R, Xia H, Wang W, **Yang X**. Impacts of natural hybridization and introgression on biological invasion of plant species. *Biodiversity Science*, 2010, 18(6): 577-589.
- 2009- Cao QJ, Xia H, **Yang X**, Lu B-R. Performance of hybrids between weedy rice and insect-resistant transgenic rice under field experiments: implication for environmental biosafety assessment. *Journal of Integrative Plant Biology*, 2009, 51(12): 1138-1148.
- 2009- Lu B-R, Xia H, **Yang X**, Jin X, Liu P, Wang W. Evolutionary theory of hybridization-introgression: its implication in environmental risk assessment and research of transgene escape. *Biodiversity Science*, 2009, 17(4): 362-377.
- 2007- Jiu M, Zhou XP, Tong L, Xu J, **Yang X**, Wan FH, Liu SS. Vector-virus mutualism accelerates population increase of an invasive whitefly. *PLoS ONE*, 2007, 2(1): e182.

#### Conference proceedings

- 2011- Lu B-R, **Yang X**, Xia H, Wang W. Potential ecological impacts caused by insect-resistant transgene flowing into weedy rice [A]. In Xue D.Y. (ed.): Risk Assessment and Regulation of Genetically Modified Organisms [C]. *The Proceedings of the International Biosafety Forum - Workshop 4, Beijing, April 28-29, 2011*, China Environmental Science Press, Beijing, 2012: 55-74.

#### SCIENCE FUND

- China Postdoctoral Science Foundation (first class support), 2014-2015, Director

- National Natural Science Foundation of China for Youth, 2015-2017, Director

#### **AWARDS & HONORS**

- PHD students scholarship (2008, 2009, 2011) – Fudan University
- Kwang-hua scholarship (2011) – Fudan University
- Graduate student scholarship (2006, 2007) – Fudan University
- MVP in Fudan Graduate Basketball League (2006, 2007, 2010) – Fudan University
- Outstanding Graduates Awards in Zhejiang Province (2006) - China
- Outstanding Graduates Awards (2006) – Zhejiang University
- Excellent Graduation Thesis (2006) – Zhejiang University
- Excellent academic scholarship (2004, 2005) – Zhejiang University